

New Economical Low Range Load Force Sensor Combination Helps Engineers with Data Acquisition

Sampling speed of 60 readings per second or 50 RPS for a 50 Hz operation allows data to be acquired faster

TEMECULA, CALIFORNIA, UNITED STATES, February 12, 2021 /EINPresswire.com/ -- New from Transducer Techniques an economically priced <u>Load Cell System</u> combination comprising of our popular GSO, Precision Gram Sensor, and our DPM-3, Panel Mount Load Cell Meter. This system is suitable for a variety of industrial and OEM force measurement and weighing applications. The DPM-3 can be scaled to a full five digits / samples 60 readings per second / analog output and true peak reading capability. The GSO is a tension load cell and compression Gram Sensor offered in a variety of ranges from 10 Grams to 1,000 Grams. Accuracies are consistent with highly accurate strain gage based load cells. Call or E-mail for more information on this system.

Transducer Techniques, established in 1979, designs and manufactures a complete line of load cells, torque sensors, special purpose transducers



and related instrumentation. Transducer Techniques load cells are uniquely designed for weight and force measurement in such diversified applications as process control and factory

automation. Other applications exist in numerous fields of science and industry for our load cells. All transducer sensing elements incorporate bonded foil strain gauges, wired in a full Wheatstone bridge configuration.

Technology

Load cells are electro-mechanical transducers that translate force or weight into voltage. This change in voltage produces a signal in the readout instrumentation, a repeatable



deflection or indication that can be calibrated directly in terms of the load applied to the load cell.

Construction

Construction of the load cell utilizes all the advantages of bonded foil strain gauges. Sealed within the load cell are sets of matched strain gauges bonded to a high strength element, machined to close tolerances. The strain gauges are electrically connected to form a balanced Wheatstone bridge and additional compensation resistors are added to the circuit for maintaining the accuracy of the bridge over a wide temperature range.

Operation

The principle of operation depends upon the deflection of the strain gauge filament, creating a change in its resistance, thereby unbalancing the bridge circuit. As a result, for a given input voltage, the output voltage of the bridge varies proportionally with the load and the change can be read on appropriate instrumentation.

Quality

When completed, each load cell is individually tested and calibrated. Each cell must meet or exceed rigid electrical and mechanical performance tests before it is released for service. Also, every cell is proof tested to its full rated capacity, and in most instances, to over its rated capacity.

Attributes

An important asset of our load cells is their extremely small deflection. The maximum deflection of standard cells does not exceed .012" at full load. This plus the fact that these load cells contain no moving parts opens unlimited application fields. The inherent compactness of the load cells minimizes installation problems.

The frequency response characteristics of our load cells are exceptionally good. The relatively

low mass, and the small deflection under load, result in a high-frequency response which emphasizes the use of the load cells in many services where other transducers cannot perform.

Only strain gauges of the highest quality are installed and configured by technicians who have undergone our extensive training program targeting craftsmanship and attention to detail. To the end-user, this means a quality product. All Load Cells / Force Sensors and Torque Sensors are supplied with a Calibration Certificate traceable to NIST

https://www.transducertechniques.com

Customer Support
Transducer Techniques, LLC
+1 800-344-3965
email us here
Visit us on social media:
Facebook
Twitter

This press release can be viewed online at: https://www.einpresswire.com/article/535374729

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2021 IPD Group, Inc. All Right Reserved.